

1. A system for processing substrates comprising:
a polishing head adapted to retain a substrate during
5 processing; and
a polishing material disposed below the polishing
head, the polishing material movable relative to the
polishing head in a first direction and in a second
direction different from the first direction.

10 2. The system of claim 1, wherein the polishing material
moves in the first direction when polishing one substrate
and in the second direction when polishing another
substrate.

15 3. The system of claim 1, wherein the polishing material
rotates to define the first direction.

20 4. The system of claim 1, wherein the polishing material
rotates and the polishing head provides other motion which
together define the first direction.

25 5. The system of claim 1, wherein the polishing head is
moved linearly in one or more directions to define the
first direction.

6. The system of claim 1, wherein the polishing material is
moved linearly to define the first direction.

30 7. The system of claim 1 further comprising:
a platen supporting the polishing material.

8. The system of claim 7, wherein the platen further
comprises:

Sub A

14. The method of claim 13, wherein the step of providing the first relative motion further comprises the step of:
performing a chemical mechanical planarization
5 process.

15. The method of claim 13, wherein the step of providing the first relative motion further comprises the step of:
rotating a platen supporting the polishing material.

10

16. The method of claim 13, wherein the step of providing the second relative motion further comprises the step of:
rotating a platen supporting the polishing media in a
direction opposite a rotational direction of the first
15 relative motion.

17. The method of claim 13, wherein the step of providing the first relative motion further comprises the step of:
moving a polishing head retaining the first substrate.

20

18. The method of claim 13, wherein the step of providing the first relative motion further comprises the step of:
moving the polishing head in a planar motion.

25 19. The method of claim 13, wherein the step of providing the first relative motion further comprises the step of:
moving the polishing media in a linear direction.

20. The method of claim 13, wherein the step of providing
30 the first relative motion further comprises the step of:
processing additional substrates utilizing the first
relative motion between the at least one substrates and the
polishing material before providing the second relative

09583513-053400

21. The method of claim 20, wherein the step of providing
5 the second relative motion further comprises the step of:
processing additional substrates utilizing the second
relative motion between the at least another substrate and
the polishing material.

15 23. The method of claim 13, wherein the first relative
motion is opposite the second relative motion.

25. The method of claim 13 further comprising the step of:
flowing a temperature control fluid through passages
disposed in a platen having the polishing material disposed
 25 thereon.

30 reducing the temperature of the polishing material.

27. A method for processing a substrate comprising the steps of:

providing a first relative motion between a substrate and a polishing material during at least a portion of a polishing cycle; and

providing a second relative motion between the substrate and the polishing material during at least another portion of the polishing cycle.

28. A computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions which, when executed by a processor, cause a semiconductor processing system to perform the steps of:

providing a first relative motion between at least one substrate and a polishing material; and

providing a second relative motion between at least another substrate and the polishing material.

29. The computer-readable medium of claim 28, wherein the
step of providing the first relative motion further
20 comprises the step of:

performing a chemical mechanical planarization process.

30. The computer-readable medium of claim 28, wherein the
25 step of providing the first relative motion further
comprises the step of:

rotating a platen supporting the polishing material.

31. The computer-readable medium of claim 28, wherein the
30 step of providing the second relative motion further
comprises the step of:

rotating a platen supporting the polishing media in a direction opposite a rotational direction of the first relative motion.

902
Church et al
(1969)⁵

[illegible]

32. The computer-readable medium of claim 28, wherein the step of providing the first relative motion further comprises the step of:

5 moving a polishing head retaining the first substrate.

33. The computer-readable medium of claim 28, wherein the step of providing the first relative motion further comprises the step of:

10 moving the polishing head in a planar motion.

34. The computer-readable medium of claim 28, wherein the step of providing the first relative motion further comprises the step of:

15 moving the polishing media in a linear direction.

35. The computer-readable medium of claim 28, wherein the step of providing the first relative motion further comprises the step of:

20 processing additional substrates utilizing the first relative motion between the at least one substrates and the polishing material before providing the second relative motion between the at least another substrate and the polishing material.

25

36. The computer-readable medium of claim 35, wherein the step of providing the second relative motion further comprises the step of:

processing additional substrates utilizing the second
30 relative motion between the at least another substrate and
the polishing material.

37. The computer-readable medium of claim 35 further comprising the step of:

processing another batch of substrates utilizing the first relative motion between the substrates and the polishing material.

38. The computer-readable medium of claim 28, wherein the first relative motion is in a direction opposite the second relative motion.

39. The computer-readable medium of claim 28 further comprising:

processing a third substrate utilizing the first relative motion.

40. The computer-readable medium of claim 28 further comprising:

flowing a temperature control fluid through passages disposed in a platen having the polishing material disposed thereon.

41. The computer-readable medium of claim 40, wherein the step of flowing the temperature control fluid through the platen further comprises the step of:

reducing the temperature of the polishing material.

42. A computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions which, when executed by a processor, cause a semiconductor processing system to perform the steps of:

providing a first relative motion between a substrate and a polishing material during at least a portion of a polishing cycle; and

rela
hing
ishing

Odd A3

THE **NEW** **YORK** **PUBLIC** **LIBRARY**